Amendment Under 37 C.F.R. § 1.111

U.S. Application No.: 10/582,105

Atty Dkt No.: 25000.0003

Customer Number 57362

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions, and listings, of claims in this application.

1. (Currently Amended) A print head comprising a discharge-by-heating type discharge control unit, said discharge control unit including:

a heating means including <u>a substrate</u>, a heat generation portion provided with a heat generation body <u>formed on said substrate</u>, and a driver IC that controls heat generation of said heat generation body; and

a discharge portion including a discharge electrode disposed in accordance with said heat generation body;

wherein said heat generation portion and said discharge portion are insulated from each other, and

wherein said discharge electrode is provided with a discharge generating portion where an electric discharge is caused by being heated by said heat generation body; and

wherein a surface on which <u>said discharge generating portion of</u> said discharge electrode is disposed and a surface on which said driver IC is disposed are not flush with each other.

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2. (Currently Amended) The print head of Claim 1, wherein a way according to which <u>said</u> discharge generating portion of said discharge electrode is arranged is an end-surface type in which <u>said discharge generating portion of</u> said discharge electrode is disposed at an end surface part of a<u>said</u> substrate-on which <u>said driver IC</u> is disposed.

- 3. (Currently Amended) The print head of Claim 1, wherein a way according to which <u>said</u> discharge generating portion of said discharge electrode is arranged is an edge type in which <u>said</u> discharge generating portion of said discharge electrode is disposed on an edge of <u>asaid</u> substrate on which said driver IC is disposed, so as to make an obtuse angle with a surface of said substrate.
- 4. (Currently Amended) The print head of Claim 1, wherein a way according to which <u>said</u> discharge generating portion of said discharge electrode is arranged is a ridge type in which <u>said</u> discharge generating portion of said discharge electrode is disposed on a raised surface of a ridge formed on a surface of <u>asaid</u> substrate on which said driver IC is disposed.
- 5. (Previously Presented) The print head of Claim 1, further comprising a high-pressure board that is electrically connected to said discharge portion and that supplies a discharge control voltage to said discharge electrode.

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6. (Currently Amended) The print head of Claim 1, comprising a discharge by-heating type discharge control unit, said discharge control unit including:

a heating means including a heat generation portion provided with a heat generation body and a driver IC that controls heat generation of said heat generation body; and

a discharge portion including a discharge electrode disposed in accordance with said heat generation body,

wherein said heat generation portion and said discharge portion are insulated from each other, and

wherein a head substrate having said heat generation portion and said discharge portion which are formed on said substrate is disposed on a heat radiating plate.

7. (Currently Amended) An image forming apparatus comprising: a print head including: a discharge-by-heating type discharge control unit, said discharge control unit including: a heating means including a substrate, a heat generation portion provided with a heat generation body formed on said substrate and a driver IC that controls heat generation of said heat generation body; and

a discharge portion including a discharge electrode disposed in accordance with said heat generation body;

wherein said heat generation portion and said discharge portion are insulated from each other [[.]], and

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wherein said discharge electrode is provided with a discharge generating portion where

an electric discharge is caused by being heated by said heat generation body, and

wherein a surface on which said discharge generating portion of said discharge electrode

is disposed and a surface on which said driver IC is disposed are not flush with each other.

8. (Original) The image forming apparatus of Claim 7, wherein recording is performed onto

a recording medium in which a visible image appears in an inside of said recording medium in

reaction to an electric charge generated by an electric discharge of said print head.

9. (Original) The image forming apparatus of Claim 7, further including an electrostatic

latent image carrier that faces said print head.

10. (Original) The image forming apparatus of Claim 9, further including:

said electrostatic latent image carrier;

a visualizing means for forming a visible image on a surface of said electrostatic latent

image carrier based on an electrostatic latent image formed on a surface of said electrostatic

latent image carrier; and

a transferring means for transferring said visible image to a printing medium.